



A.D. 1870, 9th JULY. N° 1949.

S P E C I F I C A T I O N

OF

PETER SPENCE.

TREATING SEWAGE.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

1871.



A.D. 1870, 9th JULY. N^o 1949.

Treating Sewage.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Peter Spence at the Office of the Commissioners of Patents, with his Petition, on the 9th July 1870.

I, PETER SPENCE, of Newton Heath, Manchester, Manufacturing
5 Chemist, do hereby declare the nature of the said Invention for
“IMPROVEMENTS IN THE TREATMENT OF SEWAGE AND IN OBTAINING MANURES OR
FERTILIZING SUBSTANCES THEREFROM,” to be as follows :—

My Invention consists in treating sewage with a certain compound
whereby it is deodorized and substances are precipitated which are
10 useful fertilizing agents.

The compound I employ consists of sulphate of alumina, alum, and
persulphate of iron. The special method I propose to employ for
obtaining this compound is to employ calcined china clay or analogous
substance, and to avail myself of the mother liquor arising from the
15 alum manufacture, which mother liquor contains alum, in some cases
free sulphuric acid and sulphate of iron; this gives rise to sulphate of
alumina by combination of the acid with the clay, but leaving silica and
some other matters. The alum and sulphate of iron exist, as before

Spence's Improvements in Treating Sewage.

mentioned, in the said mother liquor. The whole of these substances being brought into chemical or mechanical combination, I evaporate the mass into a cake, in using which it may be mixed with water and allowed to flow into the sewage as is now practised with other substances, when the aforesaid deodorization and precipitation will take place. I have 5 above spoken of the mother liquor as sometimes containing free acid, if there be no such acid or not sufficient I then add it.

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